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The Road to One-to-One Pricing

By TED KEMP

Retailers have long recognized that all customers are not created equal. Some customers produce healthy margins for retailers, while cherry-pickers eat away at profits. Yet many retailers treat these customers the same, and even make the same "loyalty" programs available to all consumers regardless of their value. That's changing.

Retailers are cautiously embracing dynamic pricing strategies to foster customer loyalty, particularly among their most important customers, while maximizing revenue and profit opportunities. Whether by changing prices more frequently, optimizing pricing strategies, offering smarter promotions or targeting geographic regions, individual stores, demographic or psychographic customer groups or individual consumers, retailers are steadily bringing greater intelligence and science to the way they price goods.

Looking at the end of the road, the goal may be one-to-one pricing. Whether that model is worthwhile and cost-efficient is up for debate, but what is clear is that pricing strategies are becoming much more sophisticated. It's also clear that there are dangers involved with dynamic pricing — not least of which is the potential of angering consumers and privacy groups.

"Retail's going to go in that direction as much as it can," the CIO of a $1 billion grocery chain told Executive Technology. "But we have to be very cautious. Every retailer has to be cautious, especially when you have cross-shopping from one store to another."

THE PROMISE

To see how a successful, technology-assisted dynamic pricing strategy works, retailers need look no further than the hospitality and travel industries.

For instance, the $4.3 billion Harrah's Entertainment, which operates 26 casinos in 13 states, uses a multi-tiered loyalty card system — Gold, Platinum and Diamond — to offer individual consumers reduced food prices or low-cost hotel rooms based on their daily playing frequency. Customers who play more, get more. Because Harrah's achieved 95% occupancy in its hotels last year, the company's central challenge is not simply filling rooms, but filling them with the best customers, said David Norton, SVP of relationship marketing at Harrah's. With that in mind, Harrah's discounts room rates based on the total value of the customer — giving away rooms to some of its very best customers.

The program has helped boost Harrah's share of its customers' gaming spend to 45%, up from 36% in 1998. "That's a lot of money," said Norton.

Harrah's uses heavily customized technology from several vendors to manage its tiered system. The loyalty cards track customers' frequency of play, and each Harrah's casino has a data management system that feeds into a central data platform from Teradata, Dayton, Ohio. A pricing system from Manugistics, Rockville, Md., overlays the warehouse. Harrah's has built reports and queries out of the warehouse on business intelligence technology from Cognos, Ottawa. Harrah's uploads data from the casinos to the central data warehouse a couple of times daily.

The core difference between how retailers price their inventory and how hospitality and travel companies do the same is that the latter use yield management. They have a certain amount of inventory — hotel rooms, airline seats — and they try to fully utilize it. Along the road to one-to-one pricing, savvy retailers will realize the inventory they are trying to maximize the yield from is their customer base.

THE PATHS AND PERILS

What's possible pricing-wise in the hospitality industry doesn't necessarily translate to retail. "When the Super Bowl comes to Miami and the prices at the restaurants and hotels go up, that's dynamic pricing," said Paul Ingevaldson, SVP of international business and technology at Ace Hardware, Oak Brook, Ill. "And the hotels and the travel industry get away with that. If we would raise our prices when there's a calamity, say a flood, we would be accused of gouging. I think that is interesting that that is the perception. There's a different set of rules that the hospitality industry has somehow been able to use and we don't."

Retail consumers have sometimes become irate at the notion of variable pricing, but they traditionally accept new technologies that they feel benefit them. That two-mindedness on the part of shoppers is a central challenge now faced by retailers interested in dynamic pricing, said Gene Alvarez, VP of technology research services at Meta Group, Stamford, Conn.

"Consumers are wacky," he said. "On the one hand, they want the loyalty program to give them more recognition. But at the same time, they don't want you to do that. This is a complaint that comes up when there's a problem with returns, as in, 'Don't you know how much I spend here?'"

Yet the practice of dynamic pricing is slowly being accepted by customers through their exposure to retail practices and to the practices of adjacent service industries. "I don't think dynamic pricing is a big stretch when you think about what the loyalty cards are doing," said Ingevaldson, "because the consumers do know that people with a loyalty card are getting a better deal. So it's already happening. I think as we get softened to it, there might be more ways that technology can take advantage of that."

So how might the retail industry get to dynamic, one-to-one pricing? Though most experts and industry insiders agree that retail is evolving in that direction, they differ on how it might come about and how broadly. There are a few different paths to take when considering pricing strategies — altering pricing for items, stores and people — and there are numerous technologies available to help

increase retailers' pricing flexibility.

ELECTRONIC SHELF LABELS. For most retailers, using technology to make intelligent price changes that span their entire chains and inventory almost proves challenging enough, said Hung LeHong, research director at the GartnerG2 unit of Gartner, Stamford. Conn. So a first step for most retailers might involve making price changes for a single product across the board with greater frequency, LeHong said. Some retailers use different prices on the same product for different locations, but even this is rare. Vendors that supply the industry with pricing technology agree. Joel Weingarten, SVP of products at DemandTec, San Carlos, Calif., told Executive Technology he's never seen a retailer that makes price changes more frequently than once a week.

Electronic shelf labels can be a major enabler of quicker price changes. ESLs allow quick, storewide dynamic pricing for individual products and are now becoming priced low enough that more retailers are experimenting with them or doing limited rollouts. Using store associates to hang signs and change static marked prices creates an extreme labor cost if done too frequently, even if the analytical technology exists to let retailers know when changes should be made, LeHong said.

ESLs are electronic displays that operate by radio receiver or another transmitter. An antenna network covers the entire sales floor and connects back into a pricing software application that sits at a server either in the store or on the retailer's network. That software is sometimes integrated back to the POS and data sources such as inventory systems or order systems.

"The ESL is a huge enabler toward that more aggressive pricing strategy," said LeHong. "I don't think it's possible without them. Or if it were possible, the operational costs would outweigh the benefits you'd get from dynamic pricing."

Such technologies allow time-of-day dynamic pricing inside stores, which is a practice some retailers have flirted with outside the store for years. As early as May 2002, for example, Cheshunt, England-based Tesco tested the idea

of charging more for deliveries during peak hours and less during off hours in an effort to even out delivery rush hours.

Even technology vendors acknowledge that retailers have to tread lightly with time-of-day dynamic pricing in order to avoid upsetting consumers. Though applications such as ESLs will allow it, charging different prices during different time slots can anger customers who, for example, might live alone and only be able to make it to the store after the work day. "Time-of-day pricing is possible, but I think it's a really bad idea," said Tom Rauh, managing director at Soft Solutions, San Francisco.

Promotional pricing presents its own challenges. Offering individual customers 50% off on high-end products if they buy a certain volume of other products can be difficult to execute at the POS.

Moreover, dynamic pricing creates problems for trade promotions — the allowances suppliers and manufacturers give retailers in order to promote their products. The introduction of dynamic pricing complicates trade promotions, whose existing inefficiencies already frustrate most retailers to some degree or other. A recent study from Aberdeen Group, Boston, found that no more than 4% of retailers and manufacturers feel they have achieved "best-in-class" performance in their trade promotion management.

PRICE OPTIMIZATION. Retailers are increasingly exploring the optimization of prices in geographical zones or in non-geographic performance clusters, and software makers are building out their product lines to meet that demand. Optimization technology exists that examines product profitability, store traffic, revenue growth and volume at the store-SKU level, and uses that to generate optimal prices. It can even take competitive prices into account.

American Eagle Outfitters, Warrendale, Pa., is currently exploring variable pricing with an application from ProfitLogic, Cambridge, Mass. Though still in the early stages of implementation, the retailer has already found that it faces several questions with regard to how it should go about setting up pricing

clusters. The company still has not decided whether it's optimal to move away from a single pricing zone, or how many it should use if it chooses multiple zones.

"One of our objectives is specifically to look at zone pricing — essentially, groups of stores," said Tom Harden, American Eagle's VP of merchandise planning. "And so one of the things that we've worked with ProfitLogic on is developing the appropriate clusters of stores that perform similarly."

American Eagle, which began its ongoing project in mid-January, plans to have a new pricing strategy in place in time for its back-to-school season. The project will include its direct channel, which the company views as a unique price zone. Jim Ford, American Eagle's senior director of merchandise planning, said the company is open to varying pricing on criteria like performance that aren't parallel to geography — a notion that, culturally speaking, is a relatively new one for retailers.

"A question we're facing now is, as a company, are we willing to go with pricing zones that are not necessarily based on geographic location?" Ford said.

E-COMMERCE. The idea of varying pricing by criteria other than geography and dynamically altering prices in other kinds of clusters might have been generated within a channel that operates outside the bounds of geography: the Internet. Analysts pointed out that many of the ideas behind in-store dynamic pricing, including the notion of one-to-one, found their genesis in e-commerce.

E-commerce has also shown retailers the pitfalls of dynamic pricing. In 2000, Seattle-based Amazon.com found itself embroiled in a public relations firestorm when some of its customers claimed they were being charged higher prices than other shoppers for the same DVDs. Amazon.com denied it engaged in dynamic pricing, though it admitted it had engaged in a DVD pricing test that it called a "mistake."

So far, consumers have shown little resistance to pricing variability when retailers carefully manage their overall price image. The

previously mentioned CIO of the $1 billion grocery chain, which recently began using optimization technology from DemandTec, told Executive Technology his company has found that consumers don't object to increased prices as long as the chain avoids raising the costs of "price-sensitive" goods.

The grocer found that most of the optimization challenges it has had to overcome involve the company's own internal culture. The supermarket found that its optimization technology was recommending unexpected price changes that its merchandisers would "never, ever have attempted to do." For example, the company had to drop a policy of ending all of its prices with a "9" and adjust to seemingly bizarre prices such as "$1.24."

"It can be a tremendous cultural shift," the CIO said.

SHOPPING ASSISTANTS. Small, mobile computers that are attached to shopping carts or that can be carried by customers are highly suited for delivering one-to-one pricing. Cuesol, Quincy, Mass., makes such a device that attaches to shopping carts and is capable of one-to-one communication with customers based on their location within stores, or their shopping history through a loyalty card swiper. The touchscreen device, which uses infrared receivers to communicate with transmitters in the ceiling, is capable of linking back to the POS, pricing systems and deli systems. Still, no retailers have announced that they're using this technology as part of their pricing strategy.

Stop & Shop, also of Quincy, Mass., is running a pilot with the Cuesol device in three Massachusetts supermarkets, and plans to increase the number of stores using the technology this year. The company declined to discuss any issues related to pricing for competitive reasons, though it does see the device, which it calls the "Shopping Buddy," as a differentiator.

"We have many different kinds of competitors coming at us," a Stop & Shop spokesman said. "Not just traditional supermarkets. This is about being the first with something new that customers can't get somewhere else, on top of all the other things we provide."

Stop & Shop has a loyalty card program and has customized the Shopping Buddy to make it compatible with the cards. The spokesman said the pilot has been a success, noting that most of the customers who use the device once continue to use it on repeat trips to the store.

TIERED LOYALTY CARD PROGRAMS. Loyalty cards are critical to the question of one-to-one pricing because most experts believe if dynamic pricing occurs in retail on the individual customer level, then loyalty cards are the technology that will enable it. "The whole concept of manufacturer's suggested retail price is something that's going away," said Kent Allen, Aberdeen's research director. "You'll see the loyalty programs slowly become the window through which customer-centric pricing will happen."

Tiered loyalty card programs, such as the one at Harrah's, may be one of the next major steps toward individual pricing. Harrah's gamers typically have no problem with the fact that some customers might be getting better deals than they are, said Norton. Loyalty cards have achieved a level of normalcy in the gaming industry that saves them from alienating individuals.

"Occasionally, you might get a complaint," Norton said. "But generally, people in our industry understand there are varying levels of gaming customer. They understand this, and place themselves in the spectrum."

For now, tiered loyalty cards are rare in the retail industry, if they exist at all. Nobody who spoke with Executive Technology for this story knew of a retailer that uses a tiered system.

Retailers fear that a tiered system will gain the unwanted attention of privacy advocates and anger some consumers because of a perception that such multi-layered systems track more information on individual consumers, said Meta Group's Alvarez. If anything, he said, retailers have become less willing to go to a tiered system now than they were in the early days of loyalty cards.

However, some want to try. The anonymous grocer CIO said his company sees optimization as a foundation toward dynamic pricing that's

linked to loyalty cards. The company is currently working on ways to link its POS back to headquarters and make offers to individual customers on the fly.

"It's all doable," the CIO said. "In our particular case, we've got to make some software changes to make that happen, but we know what we want to do, and we're budgeting to do that."

Other retailers share the CIO's reticence about publicly disclosing their dynamic pricing plans. The technology is in place to make one-to-one pricing possible, and analysts who spoke with Executive Technology agreed there are probably customized pricing pilots taking place today in the industry. So far, though, none have been made public, analysts said.

THE FINAL STEP

Gartner's LeHong said convenience stores might be the retailers that first transform dynamic pricing for individuals into a large-scale reality. He noted that they deal with fewer SKUs, which makes pricing less technologically complicated. C-store customers have already shown a willingness to pay higher prices if they're offered the convenience of a quick purchase. Also, the stores are already accustomed to the frequent price changes of gasoline and changes to product assortment based on the time of day — breakfast foods during the morning commute, for example.

In fact, few if any retailers have all the separate technologies in place that would be needed to support dynamic pricing, at least not yet. Even convenience stores, LeHong noted, rarely, if ever, have ESL technology installed.

The technology does exist, and the hospitality industry has shown that consumers will accept and even embrace tiered pricing. Ace Hardware's Ingevaldson thinks the retail industry is likely to follow the lead of restaurants and hotels. "I think dynamic pricing will evolve and probably happen in our industry," he said.

The question might not be how, but when. In the future, the industry is likely to see

customers working in conjunction with retailers to show loyalty and, in return, get a price break, said Aberdeen Group's Allen. "But," he said, "I don't think any of this is ready for prime time just yet."•